

REMARKS

I. INTRODUCTION

Favorable reconsideration of this application, in light of the present amendments and the following discussion, is respectfully requested.

II. STATUS OF THE CLAIMS

By the present amendment, claim 5 is amended to correct typographical and grammatical errors. New claims 7-12 are also added. That leaves claims 1-12 pending with claims 1 and 5 being independent. It is respectfully submitted that no new matter is added by this amendment.

III. SUMMARY OF THE OFFICE ACTION

In the Office Action, the drawings are objected to under 37 C.F.R. § 1.83(a) for failing to show the “uneven contact surface” of the metal strip, as recited in claims 1 and 5; claims 1-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Sadakata et al.* (Japanese Patent 2001-027256); and claims 5-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Aota et al.* (Japanese Patent 2001-158364).

IV. OBJECTION TO THE DRAWINGS

The drawings are objected to under 37 C.F.R. § 1.83(a) for failing to show the “uneven contact surface” of the metal strip, as recited in claims 1 and 5. In response, a Replacement Drawing sheet is attached herewith including corrected drawing figures. Specifically, the metal strips 7 are shown with an uneven contact surface “8.” The specification, on page 6 at lines 13 and 14, is amended commensurate with the drawing correction.

Applicant submits that the uneven contact surface 8 of the corrected drawing figures is not new matter because the “uneven contact surface” is both described in the specification as

filed and also in the original claims as filed. The specification explains that: “[s]aid metal strips have *uneven contact surfaces* intended to put up resistance to the relative axial movement ...” (pg. 3, lns. 12-14, emphasis added); the “[d]esign variables in metal strips are: -surface *unevenness*,” (pg. 3, lns. 16-17, emphasis added); and “the metal strips (7) have an (*uneven contact surface*) with the purpose of putting up resistance to the relative axial movement of both members (2, 4).” (pg. 6, lns 13-15, emphasis added).

In view of the above description, Applicant believes no new matter is submitted and respectfully requests entrance of the corrected drawing figures and withdrawal of the objection to the drawings.

V. THE REJECTIONS OF THE CLAIMS

A. Summary of Arguments

Applicant respectfully traverses the rejections over *Sadakata et al.* (hereinafter “*Sadakata*”) and *Aota et al.* (hereinafter “*Aota*”). Regarding *Sadakata*, *Sadakata* fails to disclose, teach, or suggest a shaft having a metal strip with an uneven contact surface, as recited in independent claims 1 and 5. Regarding *Aota*, *Aota* fails to disclose, teach, or suggest a shaft with both a fastening cage and at least one metal strip, as recited in independent claim 5. The rejections are addressed in detail below.

B. Rejection of Claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by or, *Sadakata*

Claims 1-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Sadakata*, however, *Sadakata* fails to teach or render obvious all of the claim limitations of independent claim 1.

Independent claim 1 recites a shaft with male and female members, and at least one metal strip fitted between the male and female members. The metal strip of claim 1 has an uneven contact surface.

Sadakata discloses a shaft coupling that includes an inner shaft 4 (Fig. 4), an outer shaft 5 (Fig. 5), and a cushioning unit 6 (Fig. 6) fitted between the inner shaft 4 and the outer shaft 5. The cushioning unit 6 includes a cushion member 13 and a stopper 12, which has a strip 14. However, unlike the claimed invention, the strip 14 does not have an uneven contact surface. In fact, as clearly seen in the figures of *Sadakata*, the surfaces of the strip 14 are smooth.

Anticipation requires that every limitation of a claim must identically appear in a prior art reference. See *Gechter v. Davidson*, 43 U.S.P.Q. 2d 1030, 1032 (Fed. Cir. 1997). It is clear that the limitation of a metal strip with an uneven contact surface does not identically appear in *Sadakata*. Absence from the prior art reference of any claimed element negates anticipation. See *Rowe v. Dror*, 42 U.S.P.Q.2d 1550, 1553 (Fed. Cir. 1997).

Moreover, it would not have been obvious to one of ordinary skill in the art to modify the strip 14 of *Sadakata* to have the uneven contact surface of the claimed invention. As explained in Applicant's disclosure, the purpose of the uneven contact surface is to create resistance between the female and male members 2 and 4. See pg. 6, lines 13-15 of the specification. In contrast, the purpose of the cushioning unit 6 of *Sadakata*, which supports the strip 14, is to provide cushioning between the members 4 and 5, not resistance. Moreover, the outer shaft 5 of *Sadakata* has a slit opening 23 (Fig. 5) for receiving a ring 24 (Fig. 9). In operation, the inner shaft 4 of *Sadakata* is locked with the outer shaft 5 when the ring 24 on the outer shaft 5 engages with a groove 29 on the inner shaft 4 (Fig. 4) through an opening near the mouth of the unit 6.

Therefore, one skilled in the art would understand that because the members 4 and 5 of *Sadakata* are locked together by the ring 24, providing resistance to movement between those two members would be not be needed and would in fact be superfluous.

Therefore, Applicant requests reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(b).

Dependent claims 2-4 and 6 are also allowable for the same reasons. Moreover, those claims recite additional features not found in *Sadakata*. For example, claim 2 recites that the cage is clamped to the outside of the male member by deformations. No such deformations are found in *Sadakata*.

C. Rejection of Claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by or, *Aota*

Claims 5-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Aota*. *Aota*, however, fails to teach or render obvious all of the claim limitations of independent claim 5.

Independent claim 5 recites a shaft with a female member that slidably receives a male member wherein a fastening cage is fitted therebetween. Claim 5 further recites that the fastening cage has at least one recess that receives at least one metal strip.

Aota does not teach both a fastening cage and a metal strip, as recited in claim 5. *Aota* discloses a telescopic shaft having a female member 1, male member 6, and an anti-backlash member 9 wrapping around the male member 6 at location 8. The anti-backlash member 9 is one-piece that has a shell 12 (designated as the fastening cage in the Office Action), legs 10-11 and an arm piece 13 (designated as the metal strip in the Office Action). As clearly seen in Figs. 2 and 3, however, the legs 10 and 11, the shell 12, and the arm piece 13 are formed as the same

part – anti-backlash member 9. Thus, *Aota* does not disclose both a fastening cage and a metal strip as in the claimed invention.

“A claim is anticipated only if *each and every* element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987)(emphasis added). As stated in MPEP § 2131 “to anticipate a claim, the reference must teach *every* element of the claim.” (emphasis added).

Thus, the anti-backlash member 9 of *Aota* cannot be both the fastening cage and the metal strip of the claimed invention.

Moreover, even if the shell 12 and the arm piece 13 were considered different elements from each other, then the legs 10 and 11 of anti-backlash member 9 must likewise be considered different elements than shell 12. And if the legs 10 and 11 are different elements than the shell 12, then the legs 10 and 11 cannot form a recess of shell 12, as suggested in the Office Action.

Consequently, because all of the claim limitations of the claim 5, namely both a fastening cage and a metal strip, are not identically found in *Aota*, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b).

VI. NEW CLAIMS

New dependent claims 7-12 are added. Claims 7-9 depend from independent claim 1 and claims 10-12 depend from independent claim 5. Applicant submits that new claims 7-12 are allowable over both *Sadakata* and *Aota* for the same reasons discussed with respect to claims 1 and 5. Moreover, these claims recite additional features not found in the prior art.

Claims 7 and 10 recite that the male member has a polygonal cross-sectional shape; claims 8 and 11 recite that the male member has a triangular cross-section shape with flat vertexes; and claims 9 and 12 recite that the male member only has flat surfaces.

In contrast, none of the embodiments of *Sadakata* show an inner shaft 4 with a triangular cross-sectional shape with flat surfaces. Also, the member 6 of *Aota* is round not polygonal or with flat surfaces.

Therefore, Applicant submits that new claims 7-12 are also allowable over *Sadakata* and *Aota*.

VI. CONCLUSION

Consequently, in view of the foregoing discussion and present amendments, it is respectfully submitted that this application is in condition for allowance. An early and favorable action is therefore respectfully requested.

Please charge any shortage or credit any overpayment of fees to BLANK ROME LLP, Deposit Account No. 23-2185 (001058-00031). In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this response, Applicant hereby petitions under 37 C.F.R. §1.36 (a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized above.

Respectfully submitted,

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Date: May 21, 2009
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